

## URBAN SANITATION IN TAMIL NADU: A REPORT ON PUBLIC CONVENIENCES

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### EXECUTIVE SUMMARY

#### **Current Status of access to sanitation:**

Tamil Nadu is one of the most urbanized states in India with a projected slum population of 1 crore in 2017. NFHS 3 states that 57 per cent of the households in Tamil Nadu have no toilet facility. The proportion of notified and non-notified slums with no latrine facility is significantly higher for Tamil Nadu; 27 per cent and 40 per cent respectively. A recent survey by the Ministry of Urban Development shows that all Tamil Nadu cities are severely lagging behind in terms of better sanitation and hygiene.

In urban areas, where connecting the sewerage network to each and every household is a technically and legally complex process that can take decades, public toilets act as an important stopgap measure to increase access to sanitation.

#### **Key Recommendations for improving provision of public toilets:**

- **Clear cut definition of roles and responsibilities:** A single authority be made accountable for provision of public toilets in the city. Clarity in the role of the Ward Councillor and other officials in the ULBs in charge of sanitation to be made clear.
- **Better data on public toilets:** A central repository of up-to-date data on public toilets including their exact locations should be maintained at the Corporation and shared with all relevant agencies to ensure that there is quality data for effective planning and implementation of public sanitation infrastructure within the city.
- **More spending on public toilets:** The government needs to spend more on public toilets, and use up-to-date data on toilets and other city features like bus stops, market areas, and both recognized and unrecognized slums to ensure that toilets are being built in locations of greatest need.
- **User Fees for toilets:** Have differential rates for public toilets in slum colonies and low income areas, and for toilets in crowded public places like bus stands and other public facilities. Higher rates for non slum areas can earn revenues to run toilets in slum colonies.
- **New Legislation: Public toilets as well as individual household toilets should be made mandatory by introducing a relevant legislation under the Public Health Act, even for undeclared slums.**
- **Amendment in the CMDA rules to make toilet construction in apartment buildings of reasonable size mandatory**
- **Open Tenders for public toilets should be stopped:** Open tenders should be stopped. Toilets should be either allocated to a person who lives in the same area where the toilet is situated, or should be given away to retired or currently jobless sanitary workers. It was also said that the contracts should be given away to private parties, and competition should be encouraged.
- **Education on toilet usage is important:** Most toilets are left unused because residents and communities are not made well aware of the importance of toilets.

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<sup>1</sup> I acknowledge the tremendous support of friends and colleagues, and extend special thanks to all the past and current members of Transparent Chennai.

- **Learn from past mistakes and experiences:** There is a need for more research on public toilets, especially on effective long term governance.
- **Rope in Local Experts and Specialists during the planning stage itself to avoid inconsistencies and implementation failures**
- **Toilet Design, Technology and Engineering:** While constructing a toilet, we need to keep in mind the design of the toilet, and technology used for waste disposal. If experimenting with a new design, communities need to be made fully aware of its usage and benefits. The decision to go for pit latrine system versus underground sewerage, or low cost versus the regular toilets, should depend on the level of toilet usage as well as common practice in that region.
- **Toilets should be accessible 24\*7 hours:** A study of Chennai toilets showed that toilets were locked at night, encouraging people to defecate in the open during odd and unsafe hours. We need to ensure round the clock access to a toilet for each and every individual.
- **Public toilets should be built closer to slums, and busy public areas like bus stops, market places, and beaches:** Most public toilets are built without any assessment of local needs and demand. Many toilets, during the survey were found to be unused and locked up because they were situated in places where they are actually not needed. It is important that we undertake all the necessary steps to ensure that toilets are built in places where there is the demand and need for it. This might entail a complete mapping exercise of slums, busy and commercial areas, and public places like the beach where people come for recreation. This will also require coordination in information gathering between different government departments, as they would have much of the data required to understand toilet needs with them already.
- **Community/Shared Toilets should be made priority:** Maintenance of public toilets has always been a cause for concern. While the public blames the authorities for lack of maintenance, the authority blames the public for its lack of civic sense. Community toilets and shared toilets should be preferred over public toilets in areas wherever feasible.
- **Use different methods of toilet governance for meeting different kinds of public sanitation needs:** Toilets in public places like bus stops and market areas require different governance and maintenance arrangements from those in slum areas. User fees can be charged in toilets in public places, but may not be required in toilets serving communities or neighborhoods.
- **Encourage CBOs, RWAs and community leaders to take over toilet maintenance wherever applicable.**
- **Create a City Sanitation Plan for Chennai and for all cities in Tamil Nadu:** A city sanitation plan by a core committee, which takes into account the needs of the slum dwellers, constructions workers, and other informal sectors workers, should be written, and fund allocations should be made on the basis of the recommendations made by this committee.
- **Create a statutory right to sanitation:** Such a law would enable residents to use the courts in addition to other tools to hold the government accountable for providing adequate sanitation for all.

## A. INTRODUCTION

Sanitation is often called the “**orphan MDG**,” and India is among the worst countries in the world in terms of access to sanitation.<sup>2</sup> While the 7<sup>th</sup> MDG goal is to halve by 2015 the proportion of population without access to sanitation, the efforts to achieve these international targets have been insufficient and ineffective in India. The absence of sound programmes and policies to improve sanitation are reflected in our dismal sanitation figures. The Ministry of Urban Development (MoUD) under the National Urban Sanitation Policy ranked and categorized 423 cities in 2008 to evaluate their sanitary health and hygiene standards. As per these ranks, none of the cities studied by the MoUD can be categorized as “healthy and clean.” Further, cities of Tamil Nadu, which have traditionally been considered to be superior to their counterparts in terms of access to water and sanitation, also performed miserably. With the exception of Tiruchirapalli that received a comparatively higher score of 59 on 100, all others have unpardonable scores.<sup>3</sup> The latest National Family Health Survey (NFHS 3) figures for Tamil Nadu also conform to the shocking findings of the MoUD. The report states that 57 per cent of the households in Tamil Nadu have no toilet facility.

On one hand we have government funded mass programmes targeted at improving access to sanitation, but largely focused on rural areas.<sup>4</sup> On the other hand, we have rapidly urbanizing cities suffering from an acute shortage of water and sanitation, cities which have not seen as many targeted programmes in spite of the evident need. In these cities, **policies have been non-inclusive** and have led to the marginalization of impoverished residents. **The state’s inability to regularly recognize or “declare” slums<sup>5</sup> has led to an absence of comprehensive data about informal settlements**, which has meant that much of the urban poor have not been entitled to avail of pro-poor programmes announced by the government. Finally, a flagship programme called the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in December 2005 came to recognize the growing needs of urban cities. Its pro-poor mandate and inclusive design won itself a lot of supporters. However, even after six years of the programme, there seems to have been little progress in the condition of the urban poor. They **continue to live in slums without basic infrastructure and civic amenities**.

### A.1 THE CURRENT STATUS OF SANITATION IN TAMIL NADU:

Today, Tamil Nadu is one of the most urbanized states in India, and around 50 per cent of the population lives in urban areas. **Given the incredible need for sanitation, we have**

<sup>2</sup> MDG refers to the Millennium Development Goals defined by the United Nations Millennium Declaration, wherein 8 international development goals, including access to improved sanitation, were sought to be achieved by 2015.

<sup>3</sup> [Annexure 1: Sanitation status of cities in Tamil Nadu as per the National Urban Sanitation Policy](#)

<sup>4</sup> The more recent ones were the Total Sanitation Campaign launched in 1999 and the Nirmal Gram Puraskar in 2005, and even the success of these is disputable:

[https://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP\\_India\\_TSC\\_Report\\_Vol\\_1\\_Press.pdf?](https://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP_India_TSC_Report_Vol_1_Press.pdf?)

<sup>5</sup> The last round of slum declaration happened in Chennai in 1986, more than 25 years ago!

**failed to act upon existing opportunities to make a change.** For instance, the Ministry of Urban Development, in an effort to promote better urban sanitation, recently allotted Rs. 13 crores to states. The fund is to support cities in preparing City Sanitation Plans, plans in which they would assess needs and make commitments to providing access to sanitation for all. While many cities have already begun drafting their CSP's, Tamil Nadu, especially Chennai, has not taken any steps towards this goal. The state needs to ensure that the most basic needs of residents, especially those from poorer sections of society, do not go unheard.

Access to sanitation also has implications on education. The Annual Status of Education Report (ASER) shows that usable toilets could be found only in around 50 per cent of government schools in India. Four out of ten government primary schools do not have separate toilets for girls. Their data also suggests **higher dropout rates, especially for girls, in cities with inadequate sanitation facilities at schools.**<sup>6</sup> Tamil Nadu has a dropout rate of 38 per cent, which is lower than most states in India. However, this rate has been more or less constant, and has in fact increased marginally over the time period 2006-2008. This is a major cause of concern, and better sanitation facilities at the school might be one of the targeted ways of reducing school dropout rates.

Recently, the India Human Development Report 2011 regarded **open defecation as a serious threat to the health and nutritional status of India.** India constitutes one-fourth of the infant deaths that occur globally due to acute diarrhoea.<sup>7</sup> However, data released by the Indian government shows a startlingly different picture. The statistics released by Ministry of Health and Family Welfare shows that only 1818 persons died in India in 2009 due to acute diarrhoea. Out of this only 18 deaths occurred in Tamil Nadu. These figures vastly underestimate the current health needs of the society. Clearly, lack of data and the absence of a systematic system to record data are major obstacles to proper planning and policy making.

Further, according to government reports, **the proportion of notified and non-notified slums with no latrine facility was found to be significantly higher for Tamil Nadu; 27 per cent and 40 per cent respectively.**<sup>8</sup> This, along with the projected urban slum population of 1 crore for Tamil Nadu in 2017, spells doom for the urban poor. The lack of formal space for the urban poor in city master plans has forced them to opt for informal settlements, where sewerage networks cannot reach and sanitation facilities are compromised. Above all, lack of basic data regarding availability of water and sanitation, especially among the urban poor, poses a serious challenge for policy makers and is a major barrier to designing foolproof policies and programmes.

## B. PUBLIC TOILETS AND THEIR RELEVANCE

<sup>6</sup> ASER is survey of schools in rural areas, but the findings of the report can be generalized for urban areas as well. <http://www.asercentre.org/ngo-education-india.php?p=Download+ASER+reports>

<sup>7</sup> UNICEF

<sup>8</sup> *Slums in India: A Statistical Compendium*, 2011, Ministry of Housing and Urban Poverty Alleviation

*There are various ways of increasing access to sanitation in Tamil Nadu. Building public toilets is one such way and it is especially useful in slum colonies. In this context, the remainder of this document will explain the importance of public toilets in Tamil Nadu, and through the findings from Chennai's study of public toilets, will show how poorly maintained data translates into a poor knowledge base for adequate monitoring and planning of toilets. This coupled with lack of incentives to maintain public toilets, meager budget allocations, lack of clarity in roles and responsibilities at both the top and bottom levels of the government leads to a failure in the provision of public toilets. The state not only needs more public toilets to cater to the needs of the urban poor, but also needs to plan better while choosing new locations for toilets. The following section will explain these drawbacks in detail.*

In the past, research and practice have found that public toilets have been a problematic method of increasing access to sanitation. As a result, many public authorities argue that they are not necessary or useful. However, **in urban areas, where connecting the sewerage network to each and every household is a technically and legally complex process that can take decades, public toilets act as an important (if imperfect) stopgap measure to increase access to sanitation.** Moreover, public toilets cater to more than just slum-dwellers. They also serve the needs of daily commuters, of pavement dwellers and the homeless, and of informal sector workers like vegetable vendors, day labourers, construction workers, sweepers, sanitary workers and petty shop vendors. For many informal sector workers, the city's public spaces are their workplace, and providing public toilets for them can be argued to be one of the most effective and easiest ways of improving their working conditions.

In spite of their evident need, public toilets are severely ignored by the authorities even today. In most cities, public toilets are not only very few in number and badly maintained, but are also located haphazardly, in places where they might not be actually needed. Due to maintenance and location problems, even the existing ones are underutilized. **Unused and badly maintained toilets give strength to the false argument by the authorities that public toilets are no longer needed in the city, when in reality, open defecation is still widespread, and a comprehensive sewerage network is far from being a reality.**

The existing scenario calls for serious reforms in the administration of public toilets in Tamil Nadu. **Shared toilets, community toilets and public toilets ought to be taken seriously by the authorities.** However, greater spending on public toilets needs to be accompanied by careful attention to the governance system responsible for their continued operations and maintenance. The following paragraphs will pinpoint failures in toilet administration in Chennai city that can serve as lessons for how such administration needs to urgently improve in municipalities and corporations across the state.

### B.1 CHENNAI CITY: A CASE STUDY

Sanitation for the poor has not been articulated as a priority by city managers in Chennai. Less than a quarter of slum households use improved sanitation facilities in Chennai.<sup>9</sup> A survey of 3.2 lakh slum dwellers in undeclared slums of Chennai revealed that only 29% of residents in these slums had access to individual toilets or pit latrines, while 48% depended on public toilets and 22% used other means, including open defecation.<sup>10</sup> Currently, there are only 714 public toilets in Chennai for a population of 46.81 lakhs and an official slum population of over a million (Census 2011). Our research in one Zone and one ward found that many of these toilets are not functional or usable, which is likely to be true for toilets all over the city.

Transparent Chennai's mapping and survey of all 49 public toilets in Zone 4 of the Corporation of Chennai showed that despite evident need, many toilets were not being used by residents, especially women or children who would be most in need of these facilities.<sup>11</sup> Our research showed that this is because **toilets are poorly maintained, locked at night, charge user fees through a process of what appears to be informal privatization, and are located away from areas of greatest need**, such as market areas, bus stops, areas with heavy pedestrian traffic, informal workplaces, and undeveloped slums. **Budget allocations for public toilets are meagre**, yet sometimes remain unspent. **Data on public toilets are poorly maintained in the city**, suggesting a poor knowledge base for adequate planning and monitoring of toilets. Interviews with government and civil society revealed that there is very **little clarity on who is responsible for increasing access to sanitation for the poor**, for public toilets, or for access to sanitation in informal, undeclared settlements, and that this lack of clarity applies to both the top and bottom levels of government.

## B.2 SUMMARY FINDINGS FROM SURVEY OF ZONE 4 TOILETS:

1. **Poor data management and data inconsistencies:** Discrepancies in raw data indicate a weak foundation on the basis of which plans and policies are formulated, and for monitoring of toilet conditions<sup>12</sup>
2. **Shortage of toilets relative to need:** Only 714 toilets for 5million population, not enough toilets in both recognized ("declared") and unrecognized slum areas.
3. **Toilets are underutilized** for the following reasons:
  - **Structural problems and lack of cleanliness:** Basic support infrastructure like **water, electricity** and **proper sewerage** was missing in many of these toilets.
  - All toilets locked at night
  - **Caretaker of the toilet mostly absent**

<sup>9</sup> Source: NFHS 3

<sup>10</sup> Published by the Tamil Nadu Slum Clearance Board in 2005

<sup>11</sup> The study was conducted by Transparent Chennai, a project that collects and aggregates data, and creates interactive maps on issues of civic importance. Transparent Chennai's issue briefs on specific civic issues, including the one on public toilets, is available on the website: <http://www.transparentchennai.com/>

<sup>12</sup> Chennai Corporation does not maintain a central repository of the number and locations of public toilets within the city; only the zonal offices have this information for their own zones. Discrepancies were found in information acquired directly from the zonal offices as compared to the data obtained through Rtl request.

- User charges for toilets in slums through a process of informal privatization
  - Most importantly, toilets not in areas of apparent need<sup>13</sup>
4. [No clear lines of accountability for public toilets in Chennai](#)<sup>14</sup>
  5. Low budgetary allocations for maintenance of public toilets in the city

**In this context, it is imperative for the Corporation of Chennai to invest in more public toilets that are located in places of need, invest more in existing toilets, and create a system of accountability to ensure that all are maintained in a systematic manner.**

### **B.3 LEARNINGS FROM A PUBLIC MEETING ON TOILETS**

Our effort to map public toilets showcased the need for better data, management and transparency in Chennai. Besides our own in-depth survey, we did not find much more information or data for making strong recommendations about public toilets, which are an under-studied issue. It became necessary to convene a meeting with a group of local sanitation experts who could provide insights from their experience. In this context, the Transparent Chennai team at IFMR organized a meeting in December 2011 with concerned individuals, NGOs, leaders of slum-based groups, sanitary workers' unions, and other civil society groups. The institutions and groups that participated in this meeting were: Tamil Nadu State Planning Commission, Exnora, Madras Institute of Development Studies, Republican Trade Union of India, Prajnya, Women in Development, Equitas, Janodayam, IIT Madras, TAAMS (Aadi Andhra leaders), Penn Urumai Iyyakkam, Revolution by Design, Gramalaya, WaterAid, IFMR, and other civil society actors.

The meeting focused on governance issues relating to public toilets, and overall sanitation, in the state. Norms exist, but enforcement is a problem. Everybody agreed that resources and funds are adequate to meet sanitation needs, but toilet governance needs to improve for policies and programs to be implemented effectively. In the light of a recent announcement by the Municipal Administration of the state to make the state Open Defecation Free (ODF), how can implementation be more efficient and what are the alternatives one has to offer to ensure that the state is ODF in a faster and more efficient manner? Participants stated that the state needs to have a more citizen-centric approach while planning and implementing new programs and policies. In this context, the attendees talked about how entities that are independent of the government can help facilitate better governance, and function in tandem with the government, in specific cities and towns where they operate. This system of coordinated effort by the government and the civil society needs to be officialised to enable greater accountability and transparency. Findings from the public meeting are also included in the summary findings and recommendations below.

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<sup>13</sup> Annexure 2

<sup>14</sup> [Annexure 3: Interview details](#)

**The public meeting emphasized that community participation** was found to be the most critical ingredient for better planning. **The role of the civil society groups/institutions in enabling this would be:**

- To engage with local communities to understand and comprehend needs and aspirations: surveys, informal dialogues, group discussions and interviews
- To engage with the urban local bodies so that the ideas communicated are not only in sync with local needs but also with the overall goal of the ULBs
- To communicate to the local urban bodies the knowledge gained, in a simple and concise format, probably in some pre-defined format so that clear recommendations and protocols are given
- To ensure that efforts by the ULBs and civil society groups are targeted towards concern areas identified earlier through continuous engagement with communities

An example of successful civil society intervention: Gramalaya, Trichy:

Gramalaya, an NGO based in Trichy, promotes clean water, sanitation, hygiene and overall improvement of the rural, urban, coastal and tribal population in India. The NGO conducts awareness programmes and educates communities about hygiene to increase toilet coverage. Gramalaya has provided accessible and low cost sanitation to households and also helps the communities to avail financial assistance from lending institutions for fulfilling their sanitation needs. Some successful stories of Gramalaya have been:

1. Introducing eco-san toilets in the fishermen communities of Nagapattinam. 335 eco-san toilets were constructed between 2006 and 2010 which are now used by the communities without any technical problem.
2. Constructing low-cost leach pit toilets in the households with funding support from UNICEF and the Total Sanitation Campaign. A total of 200 household toilets were constructed in the target villages.
3. Thirunarayanapuram, a village located on the northern bank of Cauvery in Thottiyam block was declared open defecation free through Gramalaya's efforts, with support from Water.org. Gramalaya's approach in each region was varied depending on local needs and desires, and sustainability.

There are many such examples of civil society efforts, like that of ExNORA, Nalamdana, and international organizations like Water Aid and World Bank. Such efforts should be scaled up, by active participation from communities, NGOs and the government.

### C. SUMMARY LEARNINGS AND RECOMMENDATIONS:

These recommendations are based on a literature review on public toilets in Tamil Nadu, a public meeting on toilets attended by sanitation experts, an in-depth field study of public toilets, and interviews with officials from the government:

**Clear cut definition of roles and responsibilities:** The study results suggest that a single authority be made accountable for provision of public toilets in the city. Sanitation, especially for the poor in both declared and undeclared slum areas, should be a priority of a

single department in the government, and targeted programmes to increase access to sanitation should be initiated and closely followed up by **active citizen participation that is actively fostered by the government to ensure needs are being met.**

**Better data on public toilets:** A central repository of up-to-date data on public toilets including their exact locations should be maintained at the Corporation and shared with all relevant agencies to ensure that there is quality data for effective planning and implementation of public sanitation infrastructure within the city.

**More spending on public toilets:** The government needs to spend more on public toilets, and use up-to-date data on toilets and other city features like bus stops, market areas, and both recognized and unrecognized slums to ensure that toilets are being built in locations of greatest need.

**User Fees for toilets:** Have differential rates for public toilets in slum colonies and low income areas, and for toilets in crowded public places like bus stands and other public facilities. Higher rates for non slum areas can earn revenues to run toilets in slum colonies.

**Public toilets as well as individual household toilets should be made mandatory under the Public Health Act, even for undeclared slums.**

**Amendment in the CMDA rules to make toilet construction in apartment buildings of reasonable size mandatory**

**Open Tenders for public toilets should be stopped:** Usually open tenders are floated by the ULBs and people fight to get the contract. The person who gets the contract has no accountability towards the public toilet he/she is assigned. He neither belongs to the area, nor has any prior expertise or knowledge of maintaining and running these toilets. During the public meeting, the attendees said that there should be a basis for allocating these tenders. Open tenders should be stopped. Toilets should be either allocated to a person who lives in the same area where the toilet is situated, or should be given away to retired or currently jobless sanitary workers. It was also said that the contracts should be given away to private parties, and competition should be encouraged.

**Education on toilet usage is important:** Most toilets are left unused because residents and communities are not made well aware of the importance of toilets. The attitude needs to change and people need to be made aware of the importance attached to sanitation, and also health repercussions that one can have without access to sanitation.

**Learn from past mistakes and experiences:** There have been failed attempts as well as successful attempts to increase access to sanitation in Chennai. We need to ensure that these are well documented and tabled to ensure that future programmes and policies are in

sync with local needs and aspirations. There is a need for more research on public toilets, especially on effective long term governance.

**Rope in Local Experts and Specialists during the planning stage itself to avoid inconsistencies and implementation failures**

**Toilet Design, Technology and Engineering:** While constructing a toilet, we need to keep in mind the design of the toilet, and technology used for waste disposal. If experimenting with a new design, communities need to be made fully aware of its usage and benefits. The decision to go for pit latrine system versus underground sewerage, or low cost versus the regular toilets, should depend on the level of toilet usage as well as common practice in that region.

**Toilets should be accessible 24\*7 hours:** A study of Chennai toilets showed that toilets were locked at night, encouraging people to defecate in the open during odd and unsafe hours. We need to ensure round the clock access to a toilet for each and every individual.

**Public toilets should be built closer to slums, and busy public areas like bus stops, market places, and beaches:** Most public toilets are built without any assessment of local needs and demand. Many toilets, during Transparent Chennai's survey were found to be unused and locked up because they were situated in places where they are actually not needed. It is important that we undertake all the necessary steps to ensure that toilets are built in places where there is the demand and need for it. This might entail a complete mapping exercise of slums, busy and commercial areas, and public places like the beach where people come for recreation. This will also require coordination in information gathering between different government departments, as they would have much of the data required to understand toilet needs with them already.

**Community/Shared Toilets should be made priority:** Maintenance of public toilets has always been a cause for concern. While the public blames the authorities for lack of maintenance, the authority blames the public for its lack of civic sense. Community toilets and shared toilets should be preferred over public toilets in areas wherever feasible.

**Use different methods of toilet governance for meeting different kinds of public sanitation needs:** Toilets in public places like bus stops and market areas require different governance and maintenance arrangements from those in slum areas. User fees can be charged in toilets in public places, but may not be required in toilets serving communities or neighborhoods.

**Encourage CBOs, RWAs and community leaders to take over toilet maintenance wherever applicable.**

**Create a City Sanitation Plan for Chennai and for all cities in Tamil Nadu:** A city sanitation plan by a core committee, which takes into account the needs of the slum dwellers, constructions workers, and other informal sectors workers, should be written, and fund allocations should be made on the basis of the recommendations made by this committee.

**Create a statutory right to sanitation.** Such a law would enable residents to use the courts in addition to other tools to hold the government accountable for providing adequate sanitation for all.

**ANNEXURE 1**

City	Score
Tiruchirapalli	59.02
Chennai	53.63
Alandur	50.24
Thanjavur	48.82
Neyveli	47.60
Tirunelveli	46.82
Pallavaram	46.54
Tambaram	46.19
Nagercoil	43.91
Erode	43.26
Tiruppur	40.76
Tiruvannamalai	40.61
Coimbatore	40.49
Madurai	40.16
Kumbakonam	39.44
Pudukottai	39.12
Salem	39.02
Avadi	37.54
Vellore	37.35
Kancheepuram	36.52
Rajapalayam	33.89
Ambattur	33.46
Cuddalore	32.40
Tiruvottiyur	31.71
Dindigul	30.64
Thoothukkudi	30.15

No.	Category	Description	Points
1	Red	Cities needing immediate remedial action	< 33
2	Black	Needing considerable improvement	34-66
3	Blue	Recovering	67-90
4	Green	Healthy and clean city	91-100

**ANNEXURE 2**

Toilets were found in areas with very little foot-traffic, away from slums, market areas, or bus stops, and were sometimes hidden behind large walls or trees. A mapping of

toilets in Zone 4 against a map of undeclared slums<sup>15</sup> from a 2005 survey by the Tamil Nadu Slum Clearance Board (TNSCB) shows that that many slum areas did not have a toilet nearby, and that there were clusters of toilets where there were no slums at all. In Figure 1 below, each purple and blue dot corresponds to a slum, whereas orange dots correspond to a single public toilet. Take for instance, the northwest tip of Zone 4. One can see a cluster of slums (approximately 30,000 people), but not a single public toilet in the vicinity. Toilets also appear to be clustered in the south east corner of the zone (red arrows), but are very few and far between in the northwest parts (blue arrows) of the zone.



### ANNEXURE 3

Interviews with government officials from Chennai Metro Water, Tamil Nadu Slum Clearance Board (TNSCB), and CoC's zonal offices highlighted the absence of accountability for public toilets, as well as for sanitation for the poor as a whole. At the city level, there is no department, agency or individual overseeing public toilets, or sanitation for the poor as a whole, and residents in undeclared slums are completely overlooked. Ideally, the location of a toilet should be based on an assessment of need and local sewerage networks. However the Corporation does not seek Metro Water's advice when choosing locations for new construction. Sewer lines are connected to the toilet at a much later stage, in locations that are often not suitable for easy maintenance. The result is frequent sewer blockages, leaving the toilets unusable for days and months. Further, the Slum Clearance Board does not share its data about declared and undeclared slums with the Corporation, which means that toilets are often built with no relationship to existing settlements of the poor.

<sup>15</sup> Slums which have had no government investment in environmental improvements and are presumably areas of greatest need for sanitation